

Applicant : Craig J. Simonds et al.
Appln. No. : 10/695,717
Page : 2

REMARKS

There are no amendments presented in this reply. Claims 1-10, 12-18, 20-24 and 26-35 remain pending in the present application. Applicants respectfully request reconsideration and allowance of the application for the following reasons. In the latest Office Action, the Examiner has rejected claims 1, 3-13, 15-20 and 22-26 under 35 U.S.C. §103(a) as being unpatentable over Takahashi et al. (U.S. Patent No. 6,097,313). Applicants respectfully traverse the rejection of these claims as being unpatentable over Takahashi et al. for the following reasons.

Takahashi et al. discloses an information exchange system for exchanging information between a service provider located along a road and a vehicular driver, by using limited communication capability of a road-vehicle radio communication. The Takahashi et al. system includes a vehicle-mounted unit and a road-side unit that provides information to the vehicle-mounted unit using a road-vehicle radio communication. The vehicle-mounted unit receives information from the road-side unit and transfers at least part of the content to a vehicular occupant. The road-side unit includes a storage unit for storing information to be transmitted. The storage means stores information relating to a service provider where a service is provided at the location thereof. The road-side unit also includes an editing unit editing information stored in the storage means on the basis of a relative position between the service provider and a communication region of the transmitter and generating edited information to be transmitted. In Takahashi et al., information content to be transmitted to the vehicle may be varied depending upon relative position of the service provider and the beacon.

Applicants' invention, as recited in claim 1 is directed to a system for providing remote data and delivering context-based service to a vehicle. The system includes an off-board data source remote from a vehicle. The system also includes a compute platform for accessing the data source to acquire information and generate a stream of data as a function of time and relative location. The stream of data contains information having a variable resolution that varies based on both the time and relative location. The system further includes a data

Applicant : Craig J. Simonds et al.
Appln. No. : 10/695,717
Page : 3

communication link for communicating data between the off-board data source and the vehicle.

The stream of data is supplied to the vehicle for use onboard the vehicle. The system further includes a plurality of context advisors each providing a source of information for a designated category, a plurality of service agents, wherein the service agents perform context-information filtering based on a requested service, and an interface for interfacing with an onboard device on the vehicle, wherein the context advisors perform information collection, and the service agents employ the collected information to acquire and store pertinent information.

Applicants' claim 13 further includes a distribution station remote from the vehicle and in data communication with the off-board data source, the distribution station comprising a transceiver for communicating with the vehicle, and the compute platform generates the stream of data as a function of time and distance to a location, wherein the stream of data contains information having a variable resolution that varies based on both time and distance to the location, in addition to the plurality of context advisors, the plurality of service agents, and the interface.

Further, Applicants' claimed invention recited in claims 17 and 23 recites a method of supplying data from an off-board data supplier to an onboard device on a vehicle and delivering context-based service to the vehicle. This includes receiving a request for data from the vehicle, determining location of the vehicle, determining a time reading, and supplying data to the vehicle as a function of the time and the relative location (or distance to a location), wherein the stream of data contains information having a variable resolution that varies based on both the time and relative location. The method further includes collecting information from a plurality of context advisors, receiving a service request, performing context-information filtering based on the service request, acquiring pertinent information from the collected information, storing the pertinent information in memory, and delivering up-to-date information and services to the vehicle.

Applicants' claimed invention advantageously combines time-based information services with spatial location-based services as discussed in paragraphs 58 and 59 of the application for

Applicant : Craig J. Simonds et al.
Appln. No. : 10/695,717
Page : 4

Letters Patent for providing remote data to a vehicle and further delivers context-based service to the vehicle. An example of the data having the variable resolution is illustrated in FIG. 7 of the application showing information relevant to a location in closer proximity to the vehicle and closer in time having a higher resolution as compared to information relevant to a more remote location and more remote time in the future. The type and amount of information supplied to and stored onboard the vehicle by the system depends on both the location of the vehicle and the time of day. Information relevant to a location in close proximity to the vehicle location has a higher resolution and, hence, greater quantity than information relevant to a more remote location. Likewise, information relevant to a more current time is provided at a higher resolution and, hence, greater quantity than information relevant in time far into the future, as described in paragraph [0059] of the application. Thus, the user may be provided with a varying degree of information dependent on closeness to both time and location. Additionally, the delivery of context-based service includes the use of a plurality of context advisors each providing a source of information for a designated category and a plurality of service agents that perform context-information filtering based on a requested service, and an interface for interfacing with an onboard device on the vehicle, wherein the context advisors perform information collection and the service agents employ the collected information to acquire and store pertinent information.

The requirements for making a *prima facie* case of obviousness are described in the *Manual of Patent Examining Procedures* (M.P.E.P.) §2143 as follows:

In order to establish a *prima facie* case of obviousness, three criteria must be met. M.P.E.P. § 706.02(j). Firstly, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988). Secondly, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 231 USPQ 375 (Fed. Cir. 1986). Thirdly, the prior art reference (or references) must teach or suggest all the claim limitations. *In re Royka*, 180 USPQ 580 (C.C.P.A. 1974).

Applicant : Craig J. Simonds et al.
Appln. No. : 10/695,717
Page : 5

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991).

M.P.E.P. §2143.01 provides further guidance as to what is necessary in showing that there was motivation known in the prior art to modify a reference teaching. Specifically, M.P.E.P. §2143.01 states:

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ 2d 1430 (Fed. Cir. 1990).

Takahashi et al. fails to teach or suggest every feature of Applicants' independent claims 1, 13, 17 and 23. In the latest Office Action, the Examiner acknowledges that Takahashi et al. fails to clearly state that the information varies based on both time and relative location. The Examiner then went on to state that Takahashi et al. suggests that the information also varies based on time as indicated in column 5, lines 27-50, and that one skilled in the art would have readily recognized using both time and location criteria to vary the information. Applicants note that column 5, lines 27-50 of Takahashi et al. discloses the road-side unit may transmit information indicative of effective range in time or region, to the vehicle-mounted unit, and the vehicle-mounted unit may include means for making judgment as to whether it falls within the effective range in time or in region, or not, for deleting information judged as being out of the effective range. Nowhere does column 5, lines 27-50 disclose acquiring information and generating a stream of data as a function of time and relative location, wherein the stream of data contains information having a variable resolution that varies based on both the time and relative location. The variable resolution is a variable quantity of information that varies based on both time and location such that information relevant to a location in close proximity to the vehicle location has a higher quantity of that

Applicant : Craig J. Simonds et al.
Appln. No. : 10/695,717
Page : 6

information relevant to a more remote location, and information relevant to a more current time is provided at a higher quantity than information relevant in time far into the future. The information exchange system of Takahashi et al. may vary the degree of enhancement of information to be transferred to the driver depending on distance between the beacon and the vehicle. This is in contrast to Applicants' claims which recite a system and method generating a stream of data that contains information having a variable resolution that varies based on both the time and relative location.

It should be appreciated that Applicants' invention advantageously provides space and time-related (spatial temporal) information onboard the vehicle such that updated time and location-based information is readily made available onboard the vehicle. The information advantageously has a variable resolution based both on time and distance. Because Applicants' system advantageously combines time-based information services with spatial location-based services, the type and amount of information supplied to and stored onboard the vehicle can depend on the type of information requested, the location of the user and the time relevance of the information. Takahashi et al. does not teach or suggest varying the degree of information dependent on both time and location. Instead, Takahashi et al. merely refers to the ability to manage information indicative of time and to edit information based on time, and further mentions varying the degree of information dependent on location. Nowhere does Takahashi et al. teach or suggest a stream of data having a variable resolution that varies based on both time and relative location. Additionally, there is no teaching or suggestion or any motivation to modify Takahashi et al. to vary the degree of information to have a variable resolution that varies based on both the time and relative location as recited in Applicants' independent claims. The Examiner has pointed to no such teaching, suggestion or motivation in the Office Action.

Additionally, Takahashi et al. fails to disclose delivery of context-based services that includes a plurality of context advisors each providing a source of information for a designated category, a plurality of service agents, wherein the service agents provide context-information filtering based on a requested service, and an interface for interfacing with an onboard device

Applicant : Craig J. Simonds et al.
Appln. No. : 10/695,717
Page : 7

on the vehicle, and wherein the context advisors perform information collection and the service agents employ the collected information to acquire and store pertinent information. In the latest Office Action, the Examiner has merely referred to blocks 104, 102 and 106 for teaching the claimed context advisors, plurality of service agents, and interface, but no specific teaching is found in the reference. Applicants submit that the combination of delivering context-based service in combination with the system of providing remote data as presented in the claims is not taught nor suggested by the Takahashi et al. patent, and therefore the claims should be allowable over the Takahashi et al. reference.

With respect to the rejection of dependent claims 28, 30, 32 and 34, Applicants submit that the Examiner has failed to specifically point out any alleged teaching or suggestion in Takahashi et al. that would disclose or otherwise teach a vehicle context advisor, an environment context advisor and a personal context advisor as recited in these claims.

With respect to dependent claims 29, 31, 33 and 35, the Examiner referenced identifier 0103 of Takahashi et al. for analyzing the received context information and defining the type of information as related to one of the context advisors. Applicants respectfully request that the Examiner specifically point to the language in Takahashi et al. that discloses the identifier performing this analysis. Nowhere does Takahashi et al. appear to teach defining the type of information as related to one of the context advisors as set forth in these claims.

Accordingly, Applicants respectfully submit that Takahashi et al. fails to teach or suggest Applicants' claimed invention as set forth in the independent claims 1, 13, 17 and 23, and the rejection of these claims and the corresponding dependent claims under 35 U.S.C. §103(a) should therefore be withdrawn, which action is respectfully solicited.

Further in the Office Action, the Examiner rejected claims 12, 14, 21 and 27 under 35 U.S.C. §102(b) as being anticipated by Takahashi et al. in view of COMDEX, Mercedes-Benz article (cited by the Applicants). Applicants respectfully submit that this rejection is improper and that these claims are not anticipated by either cited references.

Applicant : Craig J. Simonds et al.
Appln. No. : 10/695,717
Page : 8

Section 2131 of the M.P.E.P. provides “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *In re Verdegaal Bros. vs. Union Oil Company of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). The M.P.E.P. further provides that multiple references may be proper in a §102 rejection when the extra references are cited to: (a) prove the primary reference contains an “enable disclosure,” (b) explaining the meaning of a term used in the primary reference, or (c) show that a characteristic not disclosed in the reference is inherent. None of exceptions (a) through (c) are applicable here. Accordingly, the rejection of claims 12, 14, 21 and 27 under 35 U.S.C. §102(b) as being anticipated by the two cited references is improper and should be withdrawn, which action is respectfully solicited.

Despite the improper rejection, Applicants would further like to note that the Examiner has correctly characterized the Takahashi et al. reference as failing to disclose locating a communication unit between the vehicle and the off-board source at a fueling station. The Examiner then went on to state that this concept is known in the art as taught in COMDEX. Applicants note that the Examiner has mistakenly interpreted the COMDEX reference to infueling to mean a fueling station. Applicants would like to point out that claims 12, 14, 21 and 27 recite a transceiver located at an engine fueling station. Recitation of an engine fueling station is distinguishable from the infueling station set forth in the COMDEX reference. Applicants believe that the use of the terminology infueling station in the COMDEX refers to the transceiver providing information as fuel, as opposed to Applicants’ claim terminology of an engine fueling station that provides engine fuel (e.g., gasoline) to the vehicle. By providing the transceiver located at the engine fueling station, the present invention advantageously allows for combined fueling of engine fuel and to communication of data and context-based service to the vehicle. Accordingly, Applicants have illustrated that COMDEX fails to disclose the location of the transceiver at an engine fueling station, therefore, the COMDEX similar to Takahashi et al., fails to disclose each and every feature of these claims.

Applicant : Craig J. Simonds et al.
Appln. No. : 10/695,717
Page : 9

Applicants further submit that the COMDEX, Mercedes-Benz article does not make up for the deficiencies of the Takahashi et al. patent as further discussed in a previous response.

By way of the foregoing remarks, Applicants have demonstrated that the claims are not unpatentable in view of Takahashi et al. and are not anticipated by Takahashi et al. combined with the COMDEX, Mercedes-Benz article, and the rejections of the claims under 35 U.S.C. §102(b) and §103(a) should therefore be withdrawn, which action is respectfully solicited.

In view of the above amendments, it is submitted that claims 1-10, 12-18, 20-24 and 26-35 define patentable subject matter and are in condition for allowance, which action is respectfully solicited. If the Examiner has any questions regarding patentability of any of the claims, the Examiner is encouraged to contact Applicants' undersigned attorney at the Examiner's convenience.

Respectfully submitted,

January 4, 2007
Date

KTG/jrb

/Kevin T. Grzelak/
Kevin T. Grzelak, Registration No. 35 169
Price, Heneveld, Cooper, DeWitt & Litton, LLP
695 Kenmoor, S.E.
Post Office Box 2567
Grand Rapids, Michigan 49501
(616) 949-9610